BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Construction of RCC Drains and Culverts at Best county-II and III and G-Ramaiah layout , Sai Archid and surrounding area in ward no:03 Yelahanka Satellite Town sub Division

JOB NUMBER

Sl No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Sl No:6 Est. Amount = 200.00 Rate in Rs.	Lakhs Amount in Rs.
1	KSRRB300-1 Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications								
	KPWD S R 2018-19	lt. No		19.10	Pg No	130			
	New CC Drain								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road		2	319.50	1.10	1.10	773.19		
	Ch:00-174.60 1st B main Road		1	174.60	1.10	1.00	192.06		
	Ch:00-226.7 1st main Road		1	226.70	1.10	1.00	249.37		
	Ch:00-221.30 2nd Main Road		2	221.30	1.10	0.90	438.17		
	Ch:00-211.75 3rd Main Road		2	211.75	1.10	1.00	465.85		
	Ch:00-45.45 Vinayaka temple road		2	45.45	1.10	1.00	99.99		
	New Kerb								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road	cum	2	319.50	0.20	0.20	25.56		
	Ch:00-174.60 1st B main Road		1	174.60	0.20	0.20	6.98		
	Ch:00-226.7 1st main Road		1	226.70	0.20	0.20	9.07		
	Ch:00-221.30 2nd Main Road		2	221.30	0.20	0.20	17.70		
	Ch:00-211.75 3rd Main Road		2	211.75	0.20	0.20	16.94		
	Ch:00-45.45 Vinayaka temple road		2	45.45	0.20	0.20	3.64		
	New Culvert								
	G-Ramaiah Main Road		5	6.70	1.40	1.00	46.90		
	G-Ramaiah Main Road		2	7.40	1.50	1.00	22.20		
	Best county-II		4	7.00	1.40	1.00	39.20		
						Total Qty	2406.60	211.79	5,09,689.00
2	KSRRB M2900-1 Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour, HOM complete as per specifications.								
	KPWD S R 2018-19	lt. No.		34.1	Pg No	254			
	New CC Drain								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road		2	319.50	1.10	0.15	105.44		
	Ch:00-174.60 1st B main Road		1	174.60	1.10	0.15	28.81		
	Ch:00-226.7 1st main Road		1	226.70	1.10	0.15	37.41		
	Ch:00-221.30 2nd Main Road		2	221.30	1.10	0.15	73.03		
	Ch:00-211.75 3rd Main Road		2	211.75	1.10	0.15	69.88		
	Ch:00-45.45 Vinayaka temple road		2	45.45	1.10	0.15	15.00		
	New Kerb								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road	Cum	2	319.50	0.20	0.15	19.17		
	Ch:00-174.60 1st B main Road		1	174.60	0.20	0.11	3.70		
	Ch:00-226.7 1st main Road		1	226.70	0.20	0.10	4.53		
	Ch:00-221.30 2nd Main Road		2	221.30	0.20	0.10	8.85		
	Ch:00-211.75 3rd Main Road		2	211.75	0.20	0.10	8.47		
	Ch:00-45.45 Vinayaka temple road		2	45.45	0.20	0.10	1.82		
	New Culvert								
	G-Ramaiah Main Road		5	6.70	1.40	0.15	7.04		
	G-Ramaiah Main Road		2	7.40	1.50	0.15	3.33		
	Best county-II		4	7.00	1.40	0.15	5.88		
						Total Qty	392.35	4479.56	17,57,555.37

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Sl No	Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
3	CRRB M2200-6 Providing TMT Bars Fe 500 steel reinforcement for R C C work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification.								
	KPWD S R 2018-19	It No	28.8.2	Pg No	229				
	One cubic mt 60kg For CC Drain	T	1				40.12		
	One cubic mt 90kg For Culvert		1				3.98		
						Total Qty	44.10	72326.98	31,89,619.82
4	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200, including cost of materials, labour, HOM complete as per specifications.								
	KPWD S R 2018-19	It No	37.59.2	Pg No	271				
	CC Drain	Cum							
	Bottom Raft								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road		2	1	319.50	1.00	0.15	95.85	
	Ch:00-174.60 1st B main Road		1	1	174.60	1.00	0.15	26.19	
	Ch:00-226.7 1st main Road		1	1	226.70	1.00	0.15	34.01	
	Ch:00-221.30 2nd Main Road		2	1	221.30	1.00	0.15	66.39	
	Ch:00-211.75 3rd Main Road		2	1	211.75	1.00	0.15	63.53	
	Ch:00-45.45 Vinayaka temple road		2	1	45.45	1.00	0.15	13.64	
	Side Wall								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road		2	2	319.50	0.15	0.65	124.61	
	Ch:00-174.60 1st B main Road		1	2	174.60	0.15	0.60	31.43	
	Ch:00-226.7 1st main Road		1	2	226.70	0.15	0.60	40.81	
	Ch:00-221.30 2nd Main Road		2	2	221.30	0.15	0.60	79.67	
	Ch:00-211.75 3rd Main Road		2	2	211.75	0.15	0.60	76.23	
	Ch:00-45.45 Vinayaka temple road		2	2	45.45	0.15	0.60	16.36	
	New Culvert								
	Bottom Raft								
	G-Ramaiah Main Road		5	1	6.70	1.40	0.25	11.73	
	G-Ramaiah Main Road		2	1	7.40	1.50	0.25	5.55	
	Best county-II		4	1	7.00	1.40	0.25	9.80	
	Side Wall								
	G-Ramaiah Main Road		5	2	6.70	0.25	0.45	7.54	
	G-Ramaiah Main Road		2	2	7.40	0.25	0.45	3.33	
	Best county-II		4	2	7.00	0.25	0.45	6.30	
							Total Qty	712.94	7070.20	50,40,628.39
5	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)								
	Approval Rate	Sqm							
	New Cover Slab								
	Best county-II								
	Ch:00-319.50 G-Ramaiah Main Road		2		319.50	0.90		575.10	
	Ch:00-174.60 1st B main Road		1		174.60	0.90		157.14	
	Ch:00-226.7 1st main Road		1		226.70	0.90		204.03	
	Ch:00-221.30 2nd Main Road		2		221.30	0.90		398.34	
	Ch:00-211.75 3rd Main Road		2		211.75	0.90		381.15	
	Ch:00-45.45 Vinayaka temple road		2		45.45	0.90		81.81	
	Deduct Existing Pre cast Slabs		-1		592.90	0.90		-533.61	

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Sl. No	Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
						Total Qty	1263.96	2337.00	29,53,874.52
6	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)								
	Approval Rate								
	New Culvert								
	G-Ramaiah Main Road	Sqm	5	6.70	1.20		40.20		
	G-Ramaiah Main Road		2	7.40	1.50		22.20		
	Best county-II		4	7.00	1.20		33.60		
						Total Qty	96.00	5418.00	5,20,128.00
7	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete								
	KPWD S.R 2018-19	It. No.	5.28.1		Pg No.	27			
	New Kerb								
	Ch:00-319.50 G-Ramaiah Main Road	Nos	2	330.00			660.00		
	Ch:00-174.60 1st B main Road		1	174.60			174.60		
	Ch:00-226.7 1st main Road		1	226.70			226.70		
	Ch:00-221.30 2nd Main Road		2	221.30			442.60		
	Ch:00-211.75 3rd Main Road		2	211.75			423.50		
	Ch:00-45.45 Vinayaka temple road		2	45.45			90.90		
							2018.3		
	No of Kerb's						4485.0		
						Total Qty	4485.0	477.00	21,39,345.00
8	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces with materials, labour complete as per specifications.								
	KPWD S.R 2018-19	It. No.	24.1		Pg No.	180			
	New Kerb								
	Ch:00-319.50 G-Ramaiah Main Road	Sqm	2	330.00		0.30	198.00		
	Ch:00-174.60 1st B main Road		1	174.60		0.30	52.38		
	Ch:00-226.7 1st main Road		1	226.70		0.30	68.01		
	Ch:00-221.30 2nd Main Road		2	221.30		0.30	132.78		
	Ch:00-211.75 3rd Main Road		2	211.75		0.30	127.05		
	Ch:00-45.45 Vinayaka temple road		2	45.45		0.30	27.27		
						Total Qty	605.49	84.80	51,345.55
9	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications.								
	KPWD S.R 2018-19	It. No.	19.14		Pg No.	143			
	Earth Work								
	Best county-III								
	BWSSB/Restoration Road Cutting	Cum							
	Ch:00-226 G-Ramaiah Main Road		1	226.00	1.00	0.43	97.18		
						Total Qty	97.18	57.03	5,541.98
10	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.								
	KPWD S.R 2018-19	It. No.	20.60		Pg No.	153			
	Best county-III								
	BWSSB/Restoration Road Cutting	Cum							
	Ch:00-226 G-Ramaiah Main Road		1	226.00	1.00	0.20	45.20		
						Total Qty	45.20	1855.00	83,846.00
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.								
	KPWD S.R 2018-19	It. No.	20.18		Pg No.	155			
	Best county-III								
	BWSSB/Restoration Road Cutting	Cum							
	Ch:00-226 G-Ramaiah Main Road		1	226.00	1.00	0.23	51.98		

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Sl. No	Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
						Total Qty	51.59	2001.28	1,04,026.53
12	KSRRB M800.6 Providing and applying primer coat with 5 % bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.								
	KPWD S R 2018-19	It. No	21.6	Pg No	158				
	Best county-III								
	BWSSB/Restoration Road Cutting								
	Ch 00-226 G-Ramaiah Main Road	Sqm	1	226.00	1.00		226.00		
						Total Qty	226.00	33.92	7,665.92
13	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications and as per directions of the Engineer in charge of work.								
	KPWD S R 2018-19	It. No	21.2	Pg No	158				
	Cleaning								
	Best county-II								
	Ch 00-226 G-Ramaiah Main Road	Sqm	1	226.00	6.40		1446.40		
						Total Qty	1446.40	5.30	7,665.92
14	KSRRB 500-11 Providing and laying bituminous macadam using 40/60 TPH capacity H.M.P. with Mechanical paver Grill (50 mm to 75 mm) with 3.4% VG-30 Bitumen on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by smooth wheeled, vibratory & tandem rollers to achieve the desired density, but excluding cost of primer / tack coat & including lead, lift and cost of all materials, labour, HOM complete as per specifications.								
	KPWD S R 2018-19	It. No	21.17.6	Pg No	160				
	Best county-II								
	BWSSB/Restoration Road Cutting								
	Ch 00-226 G-Ramaiah Main Road		1	226.00	1.00	0.05	11.30		
						Total Qty	11.30	7428.48	83,941.82
15	KSRRB 500-7 Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications.								
	KPWD S R 2018-19	It. No	21.7	Pg No	158				
	BC Overlay								
	Best county-III								
	Ch 00-226 G-Ramaiah Main Road	Sqm	2	226.00	6.40		2892.80		
						Total Qty	2892.80	12.72	36,796.42
16	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.								
	KPWD S R 2018-19	It. No	21.23.6	Pg No	162				
	BC Overlay								
	Best county-III								
	Ch 00-226 G-Ramaiah Main Road	Cum	1	226.00	6.40	0.03	43.39		
						Total Qty	43.39	8831.92	3,83,217.01
17	KSRRB M800-13 Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.								
	KPWD S R 2018-19	It. No	24.15	Pg No	182				
	Edge lane								
	Road Both Side	Sqm	1	2	226.00	0.10	45.20		
						Total Qty	45.20	454.74	20,554.25
							Total Construtuion cost		168,95,441.50
							GST 12%		20,27,452.98
							Design Report,Proof Checking & PMC Amount		4,00,000.00
							KRIDL Charges 4%		6,75,817.66

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Detailed Estimate

Sl No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs	Amount in Rs.
								Sub Total	199,96,214.05
								Miscellaneous & Rounding Off	3,785.95
								Grand Total	200,00,000.00

Certificate :

1. The workspot was inspected and work is found to be necessary
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential

Consultant
For Sri Sai Consultants

Assistant Engineer
Ward no. 03
BBMP - Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore

Administrative Sanction for Rs. Two Crore Lakhs
Two Crore only
is accorded under No. P-3749
Ward - Nava Nagarathna Ho Village
Grant Amount of
Registered as CE No. ..... Subject
to conditions contained in enclosed memo
No. EE/YNK/Std 2019-20 Dt. 11/19.

Executive Engineer

Technical Sanction
Accorded For Rs. Two Crore Lakhs only
Head of A/C 4202
CER No. 19 S Dt. 28-11-2019

[A] CE (YNK)

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